

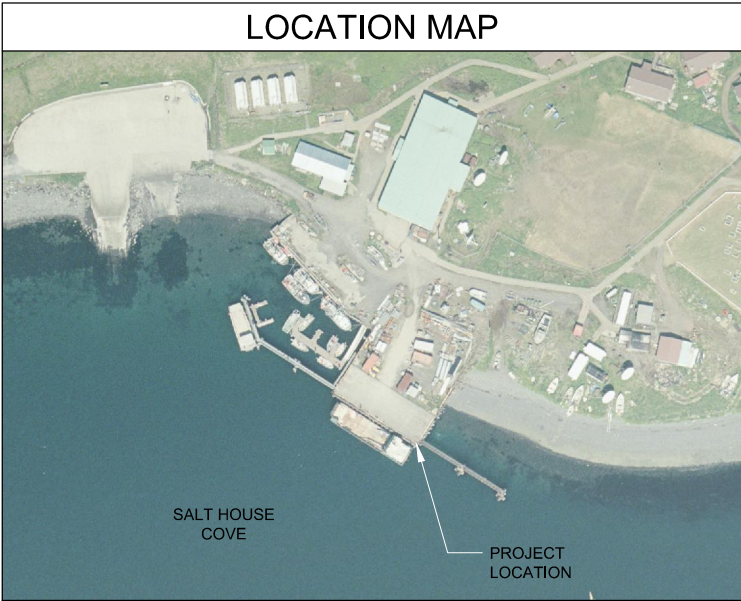
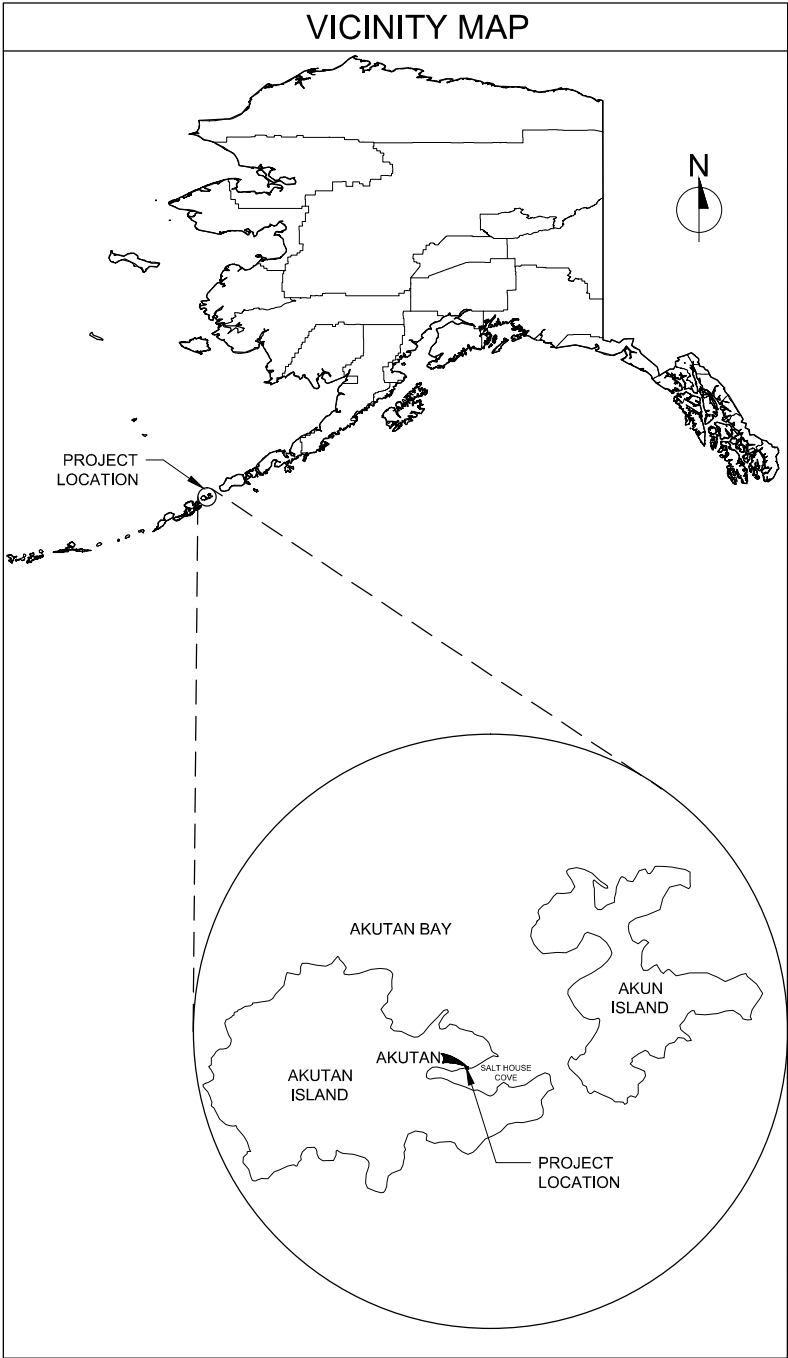
CITY OF AKUTAN

AKUTAN CITY DOCK IMPROVEMENTS

ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

STRUCTURE NO. 1946

AKUTAN, ALASKA



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REFERENCE DRAWING LIST:

(THE FOLLOWING WERE REVIEWED IN PREPARATION OF THESE DOCUMENTS)

OTT ENGINEERING, INC., AKUTAN PUBLIC DOCK, MARCH 1990

TRYCK NYMAN HAYES INC. (RECENTLY ACQUIRED BY URS), BREAKWATER EXPANSION, NOVEMBER 2003

CITY OF AKUTAN, CITY DOCK MOORAGE EXPANSION, APRIL 2004

CONTACTS

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CITY OF AKUTAN

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AKUTAN, AK 99553

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REVIEW AGENCY

ALASKA DEPT OF TRANSPORTATION AND PUBLIC FACILITIES ON BEHALF OF ALASKA MARINE HIGHWAY SYSTEM

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P.O. BOX 112506

JUNEAU, AK 99811-2506

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SHEET CONTENTS
COVER SHEET

SHEET NO. 1 of 11

G-001

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ABBREVIATIONS							
AB	AGGREGATE BASE	EMT	ELECTRICAL METALLIC TUBING	MIN	MINIMUM	SCH	SCHEDULE
AC	ASPHALTIC CONCRETE	EQ	EQUAL	MISC	MISCELLANEOUS	SF	SQUARE FOOT
ADJ	ADJUSTABLE	EQUIP	EQUIPMENT	N	NORTH	SHT	SHEET
A/E	ARCHITECT/ENGINEER	ESP	EXTERNAL STATIC PRESSURE	NIC	NOT IN CONTRACT	SIM	SIMILAR
AFF	ABOVE FINISH FLOOR	ETR	EXISTING TO REMAIN	NO	NUMBER	SP	SUMP PUMP
AFG	ABOVE FINISH GRADE	EW	EACH WAY, EDGE OF WATER	N-S	NORTH-SOUTH	SPEC	SPECIFICATION
ALT	ALTERNATE	E-W	EAST-WEST	NTS	NOT TO SCALE	SS	STAINLESS STEEL
APP	APPROXIMATE	EXC	EXCAVATION	NHW	NORMAL HEADWATER	STA	STATION
BF	BACK FACE	EX	EXISTING	OC	ON CENTER	STD	STANDARD
BM	BENCHMARK	FF	FINISH FLOOR	OD	OUTSIDE DIAMETER	STL	STEEL
BO	BOTTOM OF _____	FG	FINISHED GRADE	OED	OPEN END DUCT	STR	STRUCTURE
BOC	BOTTOM OF CONCRETE	FL	FLOW LINE	OF	OUTSIDE FACE	SYM	SYMBOL
BOW	BOTTOM OF WALL	FPS	FOOT PER SECOND	O-O	OUTSIDE TO OUTSIDE	TBR	TO BE REMOVED
BTU	BRITISH THERMAL UNIT	FT	FOOT OR FEET	OPP	OPPOSITE	TEMP	TEMPORARY
BTUH	BTU'S PER HOUR	FTG	FOOTING	OSHA	OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION	TO	TOP OF _____
CL	CENTER LINE	GALV	GALVANIZED	PL	PLATE	TOC	TOP OF CONCRETE
CA	COMPRESSED AIR	HDPE	HIGH DENSITY POLYTHENE	PC	POINT OF CURVATURE	TOS	TOP OF STEEL
C	CURVE, CONDUIT	HORIZ	HORIZONTAL	PCF	POUNDS PER CUBIC FOOT	TOW	TOP OF WALL
C-C	CENTER TO CENTER	HP	HORSEPOWER	PERM	PERMANENT	TOPO	TOPOGRAPHY
CFM	CUBIC FEET PER MINUTE	HT	HEIGHT	PERP	PERPENDICULAR	TRANS	TRANSITION
CFS	CUBIC FEET PER SECOND	HW	HEADWATER	PI	POINT OF INTERSECTION	TSL	TOP OF SLAB
CJ	CONSTRUCTION JOINT	HWL	HIGH WATER LEVEL	POB	POINT OF BEGINNING	TYP	TYPICAL
CJP	COMPLETE JOINT PENETRATION	HYD	HYDRAULIC	PP	POWER POLE	UG	UNDERGROUND
CLR	CLEAR	ID	INSIDE DIAMETER	PREFAB	PREFABRICATED	UNO	UNLESS NOTED OTHERWISE
CMP	CORRUGATED METAL PIPE	IE	INVERT ELEVATION	PRES	PRESSURE	U/S	UPSTREAM
CMU	CONCRETE MASONRY UNIT	IF	INSIDE FACE	PSF	POUNDS PER SQUARE FOOT	USACE	UNITED STATES ARMY CORPS OF ENGINEERS
CONC	CONCRETE	IN	INCH, INCHES	PSI	POUNDS PER SQUARE INCH	UTIL	UTILITY
CONST	CONSTRUCTION	INV	INVERT	PT	POINT OF TANGENCY	V	VELOCITY
CONT	CONTINUOUS	JT	JOINT	PVC	POLYVINYL CHLORIDE, POINT OF VERTICAL CURVATURE	VC	VERTICAL CURVE LENGTH
CP	CONTROL POINT, CIRCULATION PUMP	K	RATE OF VERTICAL CURVATURE	PVI	POINT OF VERTICAL INTERSECTION	VERT	VERTICAL
DEG OR °	DEGREE	KW	KILOWATT	PVT	POINT OF VERTICAL TANGENCY	W	WEST
DEMO	DEMOLITION	L	LENGTH	QCIP	QUALITY CONTROL INSPECTION PROGRAM	W/	WITH
DIA OR Ø	DIAMETER	LAT	LATITUDE	QTY	QUANTITY	W/O	WITHOUT
DOT	DEPARTMENT OF TRANSPORTATION	LB(S)	POUND(S)	R	RADIUS	WD	WIDTH
D/S	DOWNSTREAM	LD	DEVELOPMENT LENGTH	RD	ROAD	WP	WORKING POINT, WATER PROOF
DWG	DRAWING	LF	LINEAR FEET	RECT	RECTANGULAR	WS-E	WATERSTOP-EMBEDDED
E	EAST	LWL	LOW WATER LEVEL	REF	REFERENCE	WS-H	WATERSTOP-HYDROPHILIC
EA	EACH	MAINT	MAINTENANCE	REQD	REQUIRED	WT	WEIGHT
EF	EACH FACE, EXHAUST FAN	MAX	MAXIMUM	RET	RETAINING	WWF	WELDED WIRE FABRIC/REINFORCEMENT
EG	EXISTING GRADE/GROUND	MBH	THOUSANDS OF BTU'S PER HOUR	S	SOUTH	WY	WAY
EL	ELEVATION, EMERGENCY LIGHT	MFR	MANUFACTURER				

GENERAL

- G-1.

ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THESE DRAWINGS AND TECHNICAL SPECIFICATIONS.
- G-2.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING RECORD DRAWINGS FOR ALL WORK THROUGHOUT THE COURSE OF CONSTRUCTION. SUCH DRAWINGS SHALL RECORD THE LOCATION AND AS-BUILT CONDITION OF ALL PROJECT ELEMENTS. COPIES SHALL BE DELIVERED TO THE OWNER PRIOR TO THE ACCEPTANCE OF THE WORK AS INDICATED IN THE SPECIFICATIONS.
- G-3.

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS ON THE JOB AND CONTRACT DRAWINGS. THE CONTRACTOR SHALL RESOLVE ANY CONFLICTS WITH THE OWNER PRIOR TO ORDERING MATERIALS OR PROCEEDING WITH CONSTRUCTION. DETAILS AND DIMENSIONS OF EXISTING CONDITIONS AS SHOWN ON THESE DRAWINGS ARE FOR REFERENCE ONLY. THE CONTRACTOR SHALL FIELD VERIFY ALL SUCH DETAILS AND DIMENSIONS AND RESOLVE CONFLICTS.
- G-4.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES AND SUBCONTRACTORS UNDER THE CONTRACTOR'S JURISDICTION.
- G-5.

THE CONTRACTOR SHALL EXAMINE THE DOCUMENTS AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES WHICH MAY BE FOUND PRIOR TO THE START OF WORK.
- G-6.

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, SIZES AND LOCATIONS OF ALL EXISTING FACILITIES, UNDERGROUND UTILITIES, AND FEATURES TO REMAIN BEFORE STARTING WORK AND SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
- G-7.

DIMENSIONS CONTROLLED BY EXISTING STRUCTURES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION AND/OR FABRICATION. ALL ELEVATIONS AND DIMENSIONS OF EXISTING AND NEW STRUCTURES SHOWN ON THE DRAWINGS ARE BASED ON A LIMITED SURVEY. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS REGARDLESS OF DIMENSIONS AND ELEVATIONS SHOWN.
- G-8.

TOPOGRAPHIC SURVEY, GEOTECHNICAL SURVEY, AND SURVEY CONTROL INFORMATION ARE PROVIDED FOR THE PURPOSE OF INFORMATION ONLY. THE ENGINEER AND THE OWNER SHALL NOT BE HELD LIABLE FOR THE ACCURACY OF THE PROVIDED INFORMATION.
- G-9.

THE CONTRACTOR SHALL CONDUCT OPERATIONS OUTSIDE OF AREAS TO BE PRESERVED OR PROTECTED ACCORDING TO THE PLANS.
- G-10.

EXISTING GRADES AND CONDITIONS SHALL BE CONFORMED TO WHENEVER POSSIBLE. ANY ADJACENT OR OFF SITE AREAS DISTURBED BY THE CONTRACTOR'S OPERATION MUST BE RESTORED BY THE CONTRACTOR TO THE PRE DISTURBANCE CONDITION TO THE SATISFACTION OF THE OWNER.
- G-11.

THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING FACILITIES.
- G-12.

THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING MONUMENTS AND OTHER SURVEY MARKERS. MONUMENTS AND SURVEY MARKERS DESTROYED DURING CONSTRUCTION SHALL BE REPLACED BY A LICENSED LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE. CONTRACTOR SHALL PROVIDE AGENCY SURVEYORS WITH AT LEAST 48 HOURS ADVANCE NOTICE PRIOR TO REPLACEMENT.
- G-13.

THE HORIZONTAL AND VERTICAL DATUM USED WAS TAKEN FROM DESIGN DOCUMENTS "REFERENCE DRAWING LIST" ON SHEET G-001 FOR THE AKUTAN PUBLIC DOCK.

HORIZONTAL CONTROL: SHALL BE ESTABLISHED AND MAINTAINED BY THE CONTRACTOR USING THE SURVEY CONTROL LAYOUT ON SHEET X.

VERTICAL CONTROL: SHALL BE ESTABLISHED BY THE CONTRACTOR BASED ON LOCAL U.S. COAST AND GEODETIC SURVEY TIDAL BENCHMARK DATA FOR SOUTHWEST ALASKA. PROJECT SURVEYS SHALL BE CONDUCTED IN ACCORDANCE WITH SPECIFICATIONS.
- G-14.

DO NOT SCALE DRAWINGS.
- G-15.

ALL MATERIALS SHALL BE STORED IN A DRY ENVIRONMENT UNLESS OTHERWISE APPROVED BY THE OWNER AND ENGINEER.
- G-16.

THE CONTRACTOR SHALL ESTABLISH THE REFERENCE LINE AND ANY OFFSETS REQUIRED UTILIZING EXISTING MONUMENTS.
- G-17.

DETAILS MARKED "TYPICAL" SHALL APPLY IN ALL CASES, UNLESS NOTED OTHERWISE. FOR CONDITIONS DEVIATING FROM THE TYPICAL AND NOT SPECIFICALLY DETAILED IN THE PLANS, THE CONTRACTOR SHALL VERIFY CONSTRUCTION DETAILS WITH THE OWNER.
- G-18.

THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR FURNISHING AND MAINTAINING ALL WARNING SIGNS, DEVICES, AND FEATURES NECESSARY TO PROTECT THE HEALTH AND SAFETY OF THE GENERAL PUBLIC AND WORKERS AND TO PROVIDE FOR THE PROPER AND SAFE ROUTING OF VEHICULAR AND PEDESTRIAN TRAFFIC DURING THE PERFORMANCE OF THE WORK.
- G-19.

THE LOCATION OF EXISTING UTILITIES IN CONSTRUCTION AREAS SHALL BE FIELD VERIFIED BY THE CONTRACTOR. EXISTING UTILITIES TO REMAIN SHALL BE PROTECTED. ANY REPAIR OR RELOCATION REQUIRED, AS A RESULT OF DAMAGE BY CONSTRUCTION ACTIVITIES SHALL BE AT THE CONTRACTOR'S EXPENSE.
- G-20.

THESE DRAWINGS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY BRACING, SHORING AND SUPPORT NECESSARY TO ACHIEVE THE FINISHED STRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING AND ENFORCING ALL CONSTRUCTION LOAD LIMITS ON THE STRUCTURE.
- G-21.

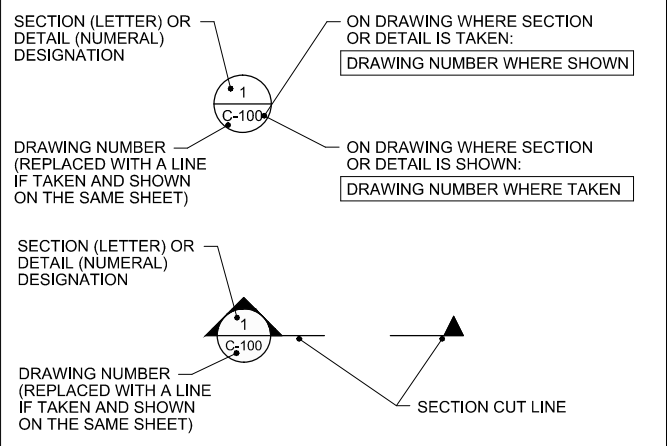
SHORING AND BRACING SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT SAFETY AND STRUCTURAL INTEGRITY IS NOT COMPROMISED DURING THE ENTIRE PROCESS. SAFETY ISSUES SHALL BE IN ACCORDANCE WITH ALL NATIONAL, STATE AND LOCAL SAFETY ORDINANCES. REQUIREMENTS OF THE USACE SAFETY AND HEALTH MANUAL, EM 385-1-1 SHALL BE ADHERED TO.
- G-22.

DRAWINGS USED TO PREPARE THESE DESIGN DOCUMENTS ARE REFERENCED ON SHEET G-001. TOP OF DOCK ELEVATION REFERENCED IN THOSE DRAWINGS IS INDICATED AS +9.0'. HOWEVER, UPON FURTHER INVESTIGATION, THE ELEVATION OF TOP OF EXISTING MAIN DOCK (SHOWN ON SHEET S-102) IS APPROXIMATELY +11.2'.

LEGEND

	EXISTING
CENTERLINE	
COMMUNICATION UTILITY LINE	
ELECTRIC UTILITY LINE	
STORM DRAIN LINE	
CONTOUR LINE - MINOR	
CONTOUR LINE - MAJOR	
FENCING	
WATER SURFACE ELEVATION	
GUARDRAIL	
STREET LIGHT	
FLOW DIRECTION	
TREE	
GATE	
SIGN	
UTILITY POLE	
CATCH BASIN	

DETAIL AND SECTION DESIGNATION



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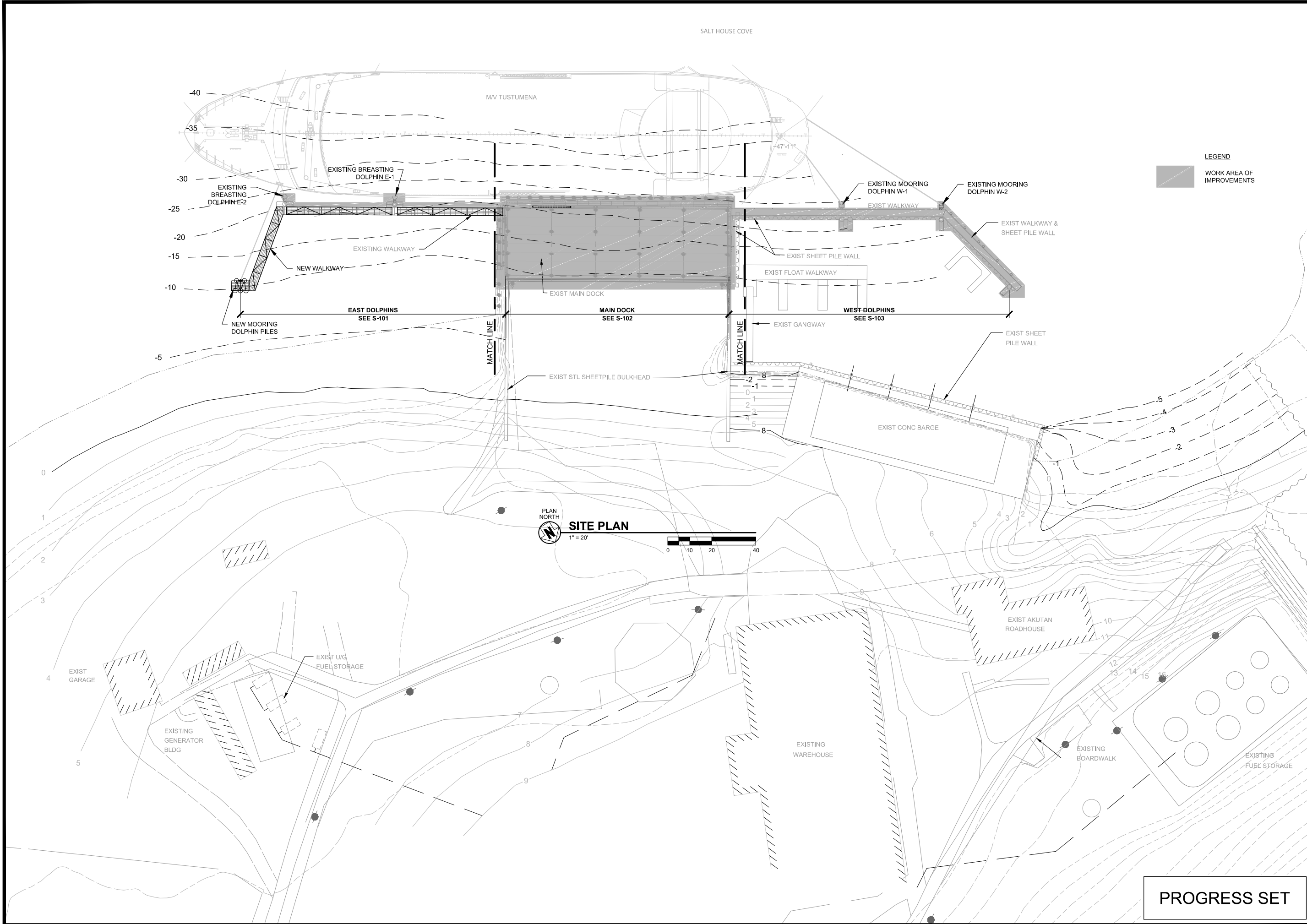
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SHEET CONTENTS
GENERAL NOTES AND ABBREVIATIONS

SHEET NO. 2 of 11

PROGRESS SET

G-002



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SHEET CONTENTS
SITE PLAN

SHEET NO. 3 of 11

C-101

PROGRESS SET

STRUCTURAL DESIGN CRITERIA:

1.

*GOVERNING CODE:

2006 INTERNATIONAL BUILDING CODE (IBC) / ASCE 7-05
2.

EARTHQUAKE DESIGN DATA

OCCUPANCY CATEGORY:

I

IMPORTANCE FACTOR:

le = 1.00

MAPPED, MCE, 5% DAMPED, SPECTRAL ACCELERATIONS:

AT SHORT PERIODS:

Ss = 1.411 G

SDs = 0.941 G

AT A PERIOD OF 1 SECOND:

S1 = 0.516 G

SD1 = 0.516 G

SITE CLASS:

D

SEISMIC DESIGN CATEGORY:

SDC = D

EQUIVALENT LATERAL FORCE PROCEDURE

3.

WIND LOADS:

130 MPH EXP C

4.

LIVE LOADS:

60 PSF AT VAULT COVERS, PLATFORMS AND WALKWAYS, UNO.
MOORING LOAD = 90,000 LB (ULTIMATE STRENGTH OF MOORING LINE)

5.

MAX VESSEL DEAD WEIGHT TONNAGE:

5000 TONS

(CURRENT VESSEL - TUSTUMENA - 4,593 TONS)

6.

GEOTECHNICAL DATA:
- STRUCTURAL STEEL NOTES:
- | MATERIAL PROPERTIES (U.N.O.) | |
|------------------------------|----------------------------------|
| STEEL PIPE PILES | Fy = 50 KSI (ASTM A252) |
| W-SHAPES | Fy = 50 KSI (A992 OR A572 Gr 50) |
| C-SHAPES & ANGLES | Fy = 36 KSI (A36) |
| PLATES & BARS | Fy = 36 KSI (A36) |
| SQUARE/RECTANGULAR HSS | Fy = 46 KSI (A500 Gr B) |
| ROUND HSS | Fy = 42 KSI (A500 Gr B) |
| STEEL PIPE | Fy = 35 KSI (A53 Gr. B) |
| RODS | Fy = 36 KSI (A36) |
| SS SHAPES/ RODS | Fy = 42 KSI (AISI 316L) |
| SS BOLTS | Fy = 30 KSI (AISI 304) |
| ANCHOR RODS | Fy = 36 KSI (F1554 Gr. 36) |
- S-1.

STEEL BEAMS WITH RESIDUAL CAMBER RESULTING FROM MILL FABRICATION OR ROLLING SHALL BE SHOP FABRICATED AND ERECTED SUCH THAT THE RESIDUAL CAMBER COUNTERACTS GRAVITY LOAD DEFLECTION.

S-2.

PROVIDE NON-SHRINK GROUT PER SPECIFICATIONS AS REQUIRED AT BASE PLATES OR OTHER LEVELING SURFACES.

S-3.

ALL WELDING OF NEW STEEL IS TO BE WITH E70XX ELECTRODES, UNO. WELDING SHALL BE IN ACCORDANCE WITH THE LATEST AWS SPECIFICATIONS BY CERTIFIED WELDERS.

S-4.

WHEN FIELD WELDING TO EXISTING STEEL, ADJUST WELDING PROCEDURES AS REQUIRED TO BE COMPATIBLE WITH THE NEW AND EXISTING STEEL. CONTRACTOR SHALL SUBMIT ADJUSTED WELDING PROCEDURES FOR REVIEW PRIOR TO COMMENCEMENT OF WORK.

S-5.

STEEL CONNECTIONS NOT DETAILED ON THE PLANS ARE TO BE THE FABRICATOR'S STANDARD AND ARE TO BE SELECTED AND DESIGNED IN ACCORDANCE WITH AISC SPECIFICATIONS.

S-6.

UNLESS NOTED OTHERWISE, THE MINIMUM CONNECTION PLATE/ANGLE THICKNESS SHALL BE 5/16", THE MINIMUM WELD 1/4", AND THE MINIMUM DESIGN LOAD ON ANY CONNECTION 10 KIPS.

S-7.

FULLY SEAL FAYING SURFACES WITH WELDS, EXCEPT AT FULLY GALVANIZED ALL BOLTED CONNECTIONS.

S-8.

ALL NEW STEEL SECTIONS TO BE HOT DIP GALVANIZED
- STEEL BAR GRATING NOTES:
- GT-1.

GRATING SHALL BE AS INDICATED IN PLANS AND AS SPECIFIED IN SECTION 05500 OF THE PROJECT SPECIFICATIONS.

GT-2.

GRATING SHALL BE BANDED.

GT-3.

BUTT GRATING OF ADJACENT SPANS AT BEAM CENTERLINES.

GT-4.

UNLESS NOTED OTHERWISE, ATTACH GRATING TO EACH SUPPORT WITH SADDLE CLIP AND 1/4" DIA. FASTENER. MINIMUM 4 CONNECTIONS PER PANEL, ONE AT EACH SUPPORT.

GT-5.

GRATING AND ASSOCIATED HARDWARE SHALL BE OF SAME MATERIAL.

GT-6.

REMOVABLE OR HINGED SECTIONS OF GRATING SHALL BE LOCKABLE. COORDINATE WITH OWNER.
- CONCRETE AND REPAIR NOTES:
- MATERIAL PROPERTIES (U.N.O.)
- CONCRETE/CAST-IN-PLACE - F'c = 4000 psi UNO
- CONCRETE REINFORCEMENT - Fy = 60 KSI (A615 GR 60)
- CR-1.

ALL REINFORCEMENT BARS SHALL BE FABRICATED IN ACCORDANCE WITH THE LATEST CRSI MANUAL OF STANDARD PRACTICE AND SHALL BE CLEAN AND FREE OF GREASE AND SCALING RUST.

CR-2.

ALUMINUM CONDUIT IS NOT PERMITTED TO BE EMBEDDED IN CONCRETE.

CR-3.

ALL EPOXY ANCHORS AND EPOXY DOWELS INTO CONCRETE OR SOLID MASONRY TO BE EPOXY ANCHORED WITH HILTI RE-500-SD EPOXY OR SIMPSON SET XP EPOXY UNLESS INDICATED OTHERWISE.
- DRIVEN PILE NOTES:
- DP-1.

PILE SHALL BE DRIVEN TO APPROPRIATE RESISTANCE IN ORDER TO REACH REQUIRED LOAD CAPACITY SPECIFIED ON THE PLANS, OR MINIMUM DEPTH AS DIRECTED BY ENGINEER TO MEET REQUIRED LOAD CAPACITY.

DP-2.
- SHOP DRAWINGS
- SD-1.

SHOP DRAWINGS SHALL BE SUBMITTED AS REQUIRED BY THE SPECIFICATIONS. CONSTRUCTION DOCUMENTS SHALL NOT BE REPRODUCED FOR USE AS SHOP DRAWINGS.

SD-2.

THE GENERAL CONTRACTOR SHALL REVIEW ALL SHOP DRAWINGS AND PRODUCT DATA FOR CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS PRIOR TO SUBMITTAL. REVIEWED SUBMITTALS SHALL BE STAMPED BY THE CONTRACTOR. ANY SHOP DRAWING OR PRODUCT DATA NOT REVIEWED AND STAMPED BY THE GENERAL CONTRACTOR WILL BE REJECTED. GENERAL CONTRACTOR SHALL CLOUD OR FLAG ALL ITEMS NOT IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND SHALL VERIFY ALL DIMENSIONS.

SD-3.

ANY CHANGES, SUBSTITUTIONS OR DEVIATIONS FROM THE ORIGINAL CONTRACT DRAWINGS SHALL BE CLOUDED BY THE MANUFACTURER OR FABRICATOR. ANY CHANGES, SUBSTITUTIONS, OR DEVIATIONS WHICH ARE CLOUDED OR FLAGGED BY SUBMITTING PARTIES SHALL NOT BE CONSIDERED APPROVED AFTER THE ENGINEER'S REVIEW, UNLESS SPECIFICALLY NOTED ACCORDINGLY BY THE ENGINEER.

SD-4.

THE APPROVED SHOP DRAWINGS DO NOT REPLACE THE ORIGINAL CONTRACT DRAWINGS. ITEMS OMITTED OR SHOWN INCORRECTLY ARE NOT TO BE CONSIDERED CHANGES TO THE ORIGINAL CONTRACT DRAWINGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ITEMS OMITTED OR SHOWN INCORRECTLY ARE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DRAWINGS.

SD-5.

SHOP DRAWING REVIEW IS INTENDED ONLY FOR GENERAL CONFORMANCE TO THE DESIGN CONCEPT AND CONSTRUCTION DOCUMENTS. CORRECT DIMENSIONING OF ALL ELEMENTS REMAINS THE RESPONSIBILITY OF THE CONTRACTOR.
- STRUCTURAL TESTING AND INSPECTION:
- STI-1.

REFER TO TESTING AND INSPECTION NOTES, SHEET G-00X, FOR GENERAL TESTING AND INSPECTION NOTES.

STI-2.

INSPECTION FIRM SHALL INSPECT FOR CONFORMANCE TO SPECIFIED REQUIREMENTS FOR PROTECTING NEW CONCRETE FROM THE ADVERSE EFFECTS OF WEATHER, HEATING EQUIPMENT AND OTHER POTENTIALLY HARMFUL CONDITIONS.

STI-3.

CONSTRUCTION TESTING AND INSPECTION BY THE TESTING AND INSPECTION FIRM IS REQUIRED AS FOLLOWS:

A.

CONCRETE TESTING IN ACCORDANCE WITH SPECIFICATIONS

B.

CONCRETE INSPECTION IN ACCORDANCE WITH SPECIFICATIONS INCLUDING BUT NOT LIMITED TO: THE PLACEMENT OF REINFORCEMENT, REINFORCING BAR SIZES, SPACING, TIES, LAPS, COVER, EMBEDDED ITEMS, ANCHOR BOLTS, AND CONCRETE PLACEMENT.

C.

STEEL INSPECTION IN ACCORDANCE WITH SPECIFICATIONS, INCLUDING BUT NOT LIMITED TO: HIGH STRENGTH BOLTS, WELDING, MATERIAL VERIFICATION, PILE SPLICING AND CONNECTIONS.

D.

STEEL CONDUIT LINING IN ACCORDANCE WITH SPECIFICATIONS

E.

STRUCTURE FOUNDATION EXCAVATION AND BACKFILL IN ACCORDANCE WITH SPECIFICATIONS.

F.

ROCK ANCHOR INSPECTION AND TESTING IN ACCORDANCE WITH SPECIFICATIONS.

G.

CONTINUOUS INSPECTION OF EPOXY INJECTED ANCHOR INSTALLATION PER APPROVED INTERNATIONAL CODE COUNCIL (ICC) EVALUATION REPORT.
- PAINTING AND FINISH NOTES:
- PF-1.

XXXX
- Mead & Hunt

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- SHEET CONTENTS
STRUCTURAL NOTES
- SHEET NO. 4 of 11
- S-001
- PROGRESS SET
- X:\30543-00\1000\TECHNICAL\DOCK IMPROVEMENTS\DWGS\001 STRUCTURAL NOTES.DWG 12/5/2012 8:53:28 AM

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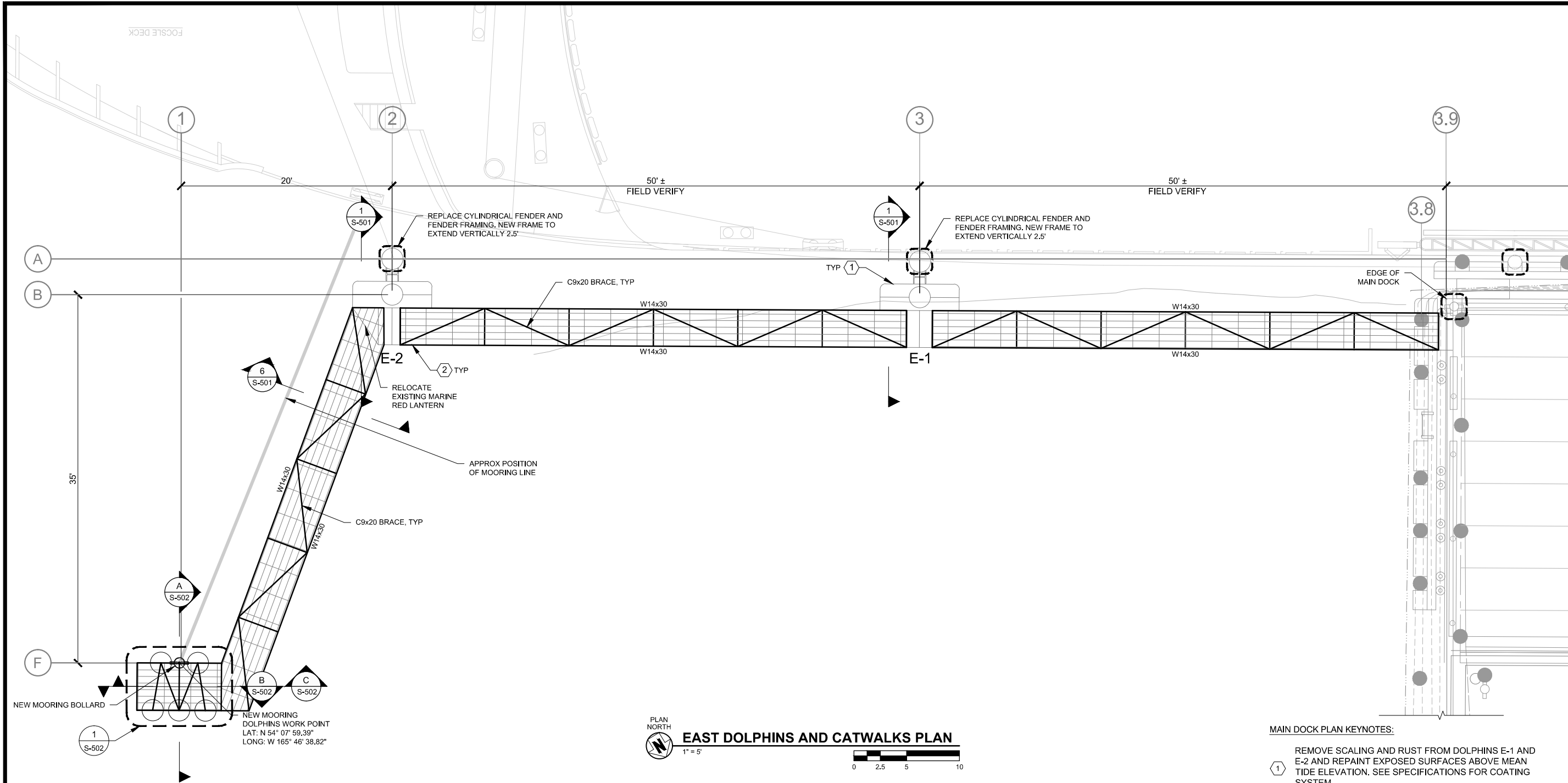
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SHEET CONTENTS
EAST DOLPHINS PLAN
AND SECTIONS

SHEET NO. 5 of 11

S-101



MAIN DOCK PLAN KEYNOTES:

- 1 REMOVE SCALING AND RUST FROM DOLPHINS E-1 AND E-2 AND REPAINT EXPOSED SURFACES ABOVE MEAN TIDE ELEVATION. SEE SPECIFICATIONS FOR COATING SYSTEM.
- 2 REPLACE ALL CATWALK BEAM SHEAR CONNECTIONS AT MAIN DOCK, DOLPHIN E-1 AND DOLPHIN E-2. NEW CONNECTION DETAIL SHOWN IN DETAIL X ON SHEET S-501.

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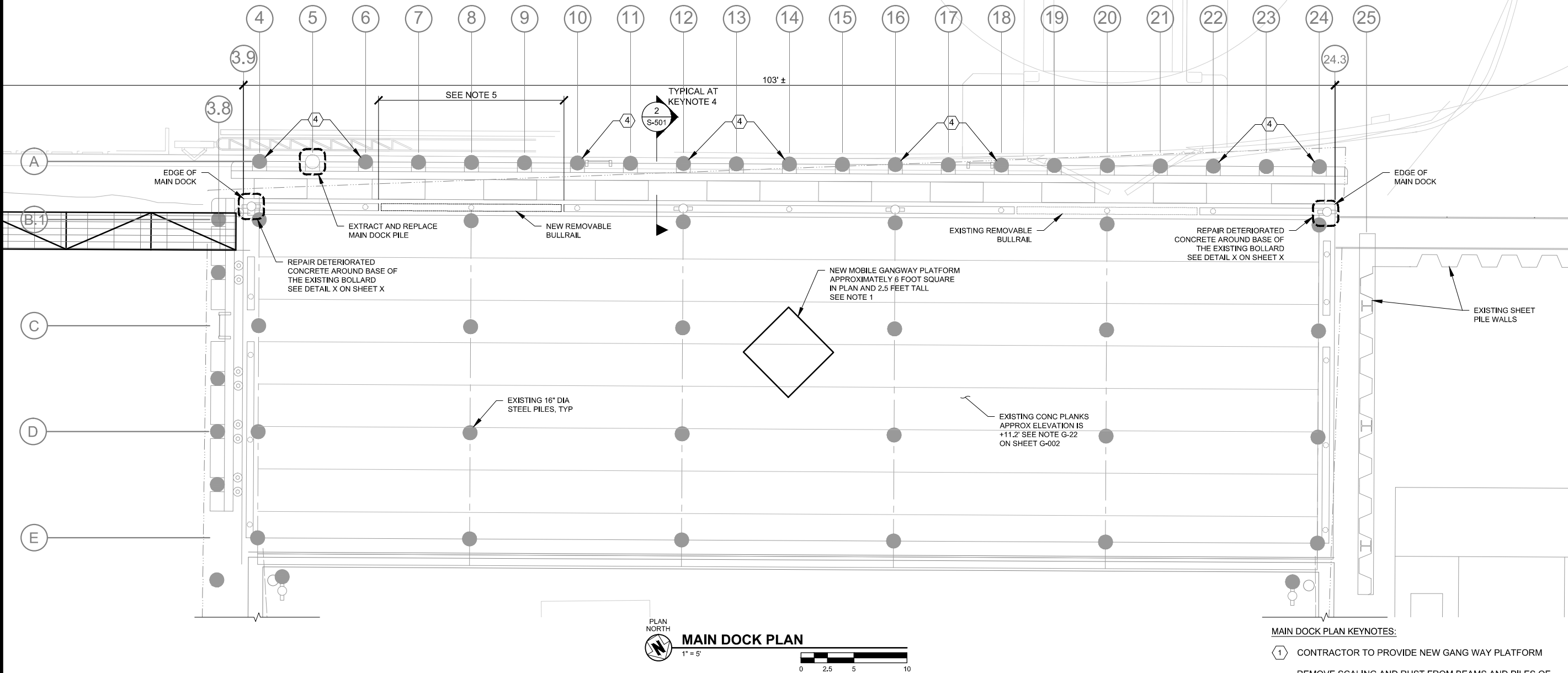
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SHEET CONTENTS
MAIN DOCK PLAN AND
SECTIONS

SHEET NO. 6 of 11

S-102



MAIN DOCK PLAN KEYNOTES:

- 1 CONTRACTOR TO PROVIDE NEW GANG WAY PLATFORM
- 2 REMOVE SCALING AND RUST FROM BEAMS AND PILES OF THE FENDERING SYSTEM AS WELL AS DECK SUPPORT FRAMING AND REPAINT EXPOSED SURFACES ABOVE MEAN TIDE ELEVATION. SEE SPECIFICATIONS FOR COATING SYSTEMS.
- 3 REPLACE ALL TOP CAP PLATES OF UNRAISED FENDER PILES. NEW PLATE SHOULD MATCH DIAMETER OF EXISTING PILE. SEE DETAIL X ON SHEET S-501.
- 4 EXTEND PILES AND FENDERING SYSTEM VERTICALLY 2.5' SEE DETAIL 2 ON SHEET S-501.
- 5 PROVIDE NEW 15± SECTION OF REMOVABLE BULL RAIL, SIMILAR TO SECTION BETWEEN GRIDS 18 AND 22. REFER TO DETAIL X ON SHEET X

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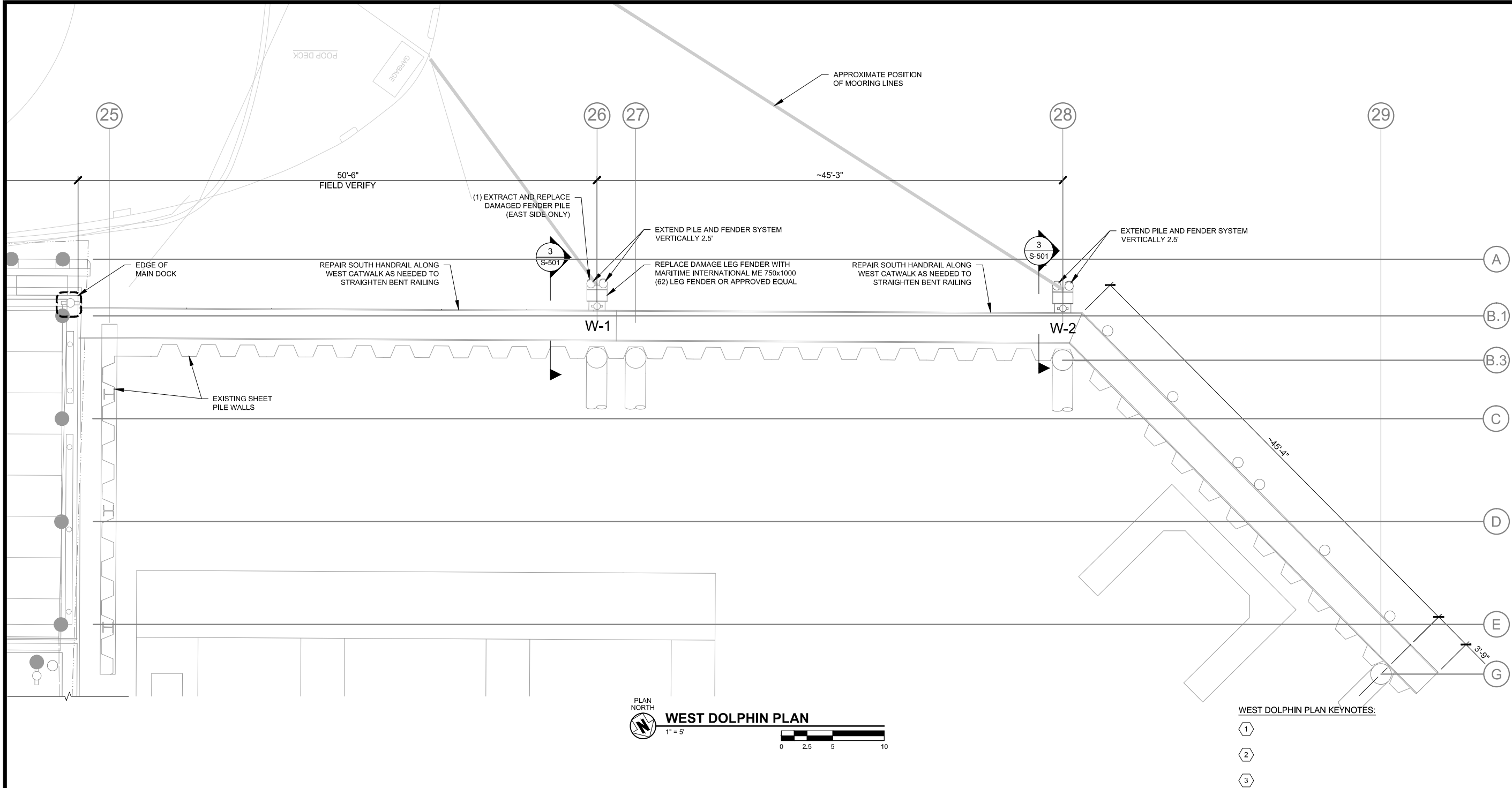
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SHEET CONTENTS
WEST DOLPHINS PLAN
AND SECTIONS

SHEET NO. 7 of 11

S-103



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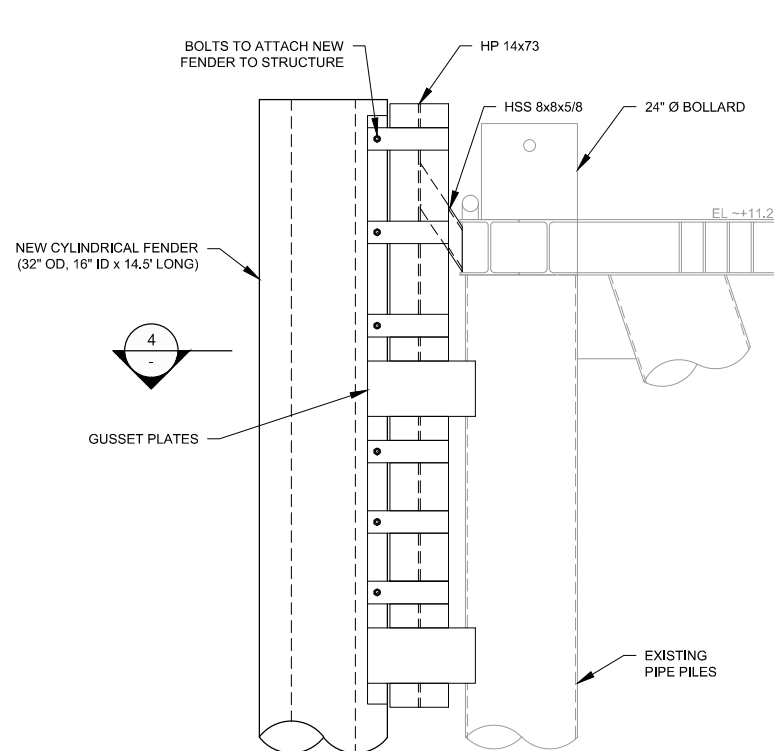
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SHEET CONTENTS
STRUCTURAL DETAILS

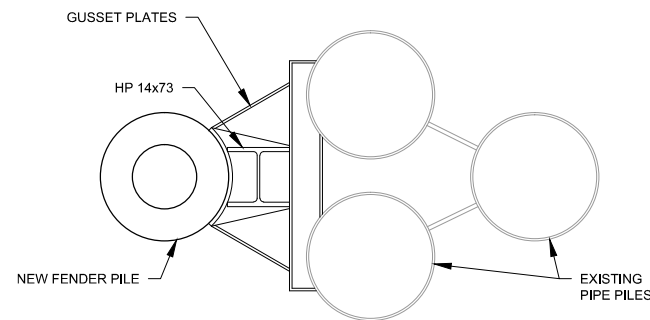
SHEET NO. 8 of 11

S-501

PROGRESS SET



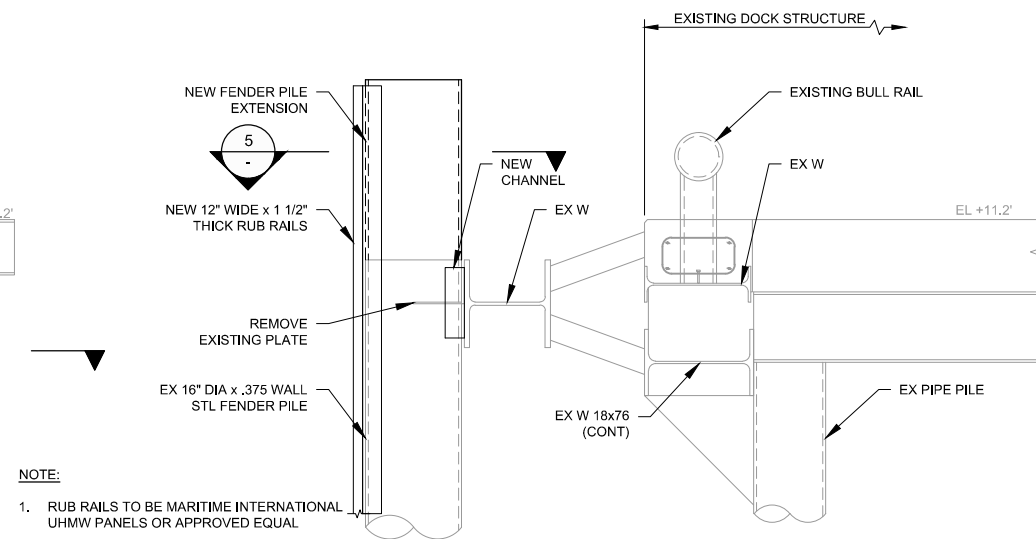
1 MOORING DOLPHIN E1 & E2
1/2" = 1'-0"



4 SECTION
1/2" = 1'-0"

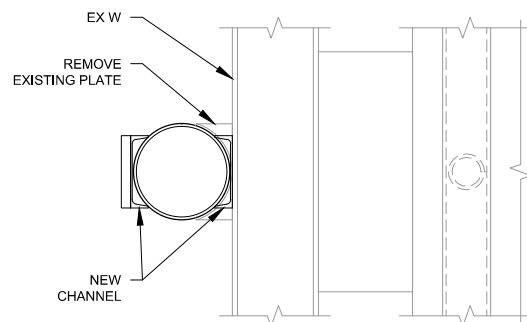
- EAST REPAIR / REINFORCEMENT
SHEAR PLATE CONNECTIONS

- EAST
MOORING DOLPHIN



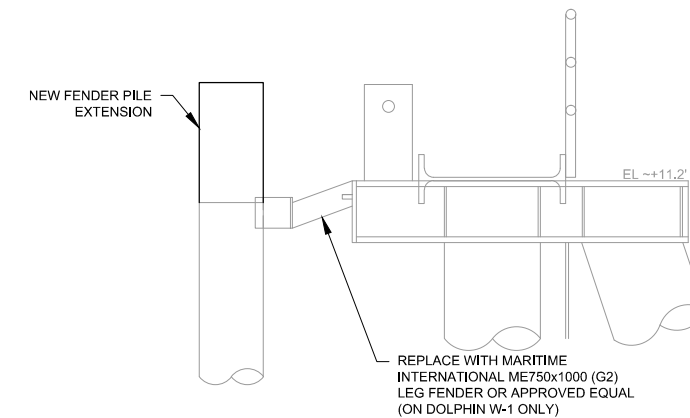
NOTE:
1. RUB RAILS TO BE MARITIME INTERNATIONAL
UHMW PANELS OR APPROVED EQUAL

2 FENDER PILE EXTENSION AT MAIN DOCK
3/4" = 1'-0"

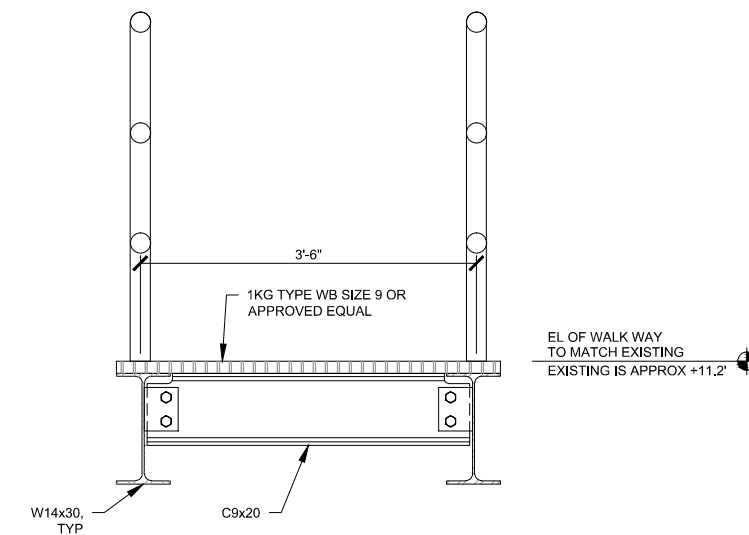


5 SECTION
3/4" = 1'-0"

- MAIN DOCK
PILE CAP REPLACEMENT



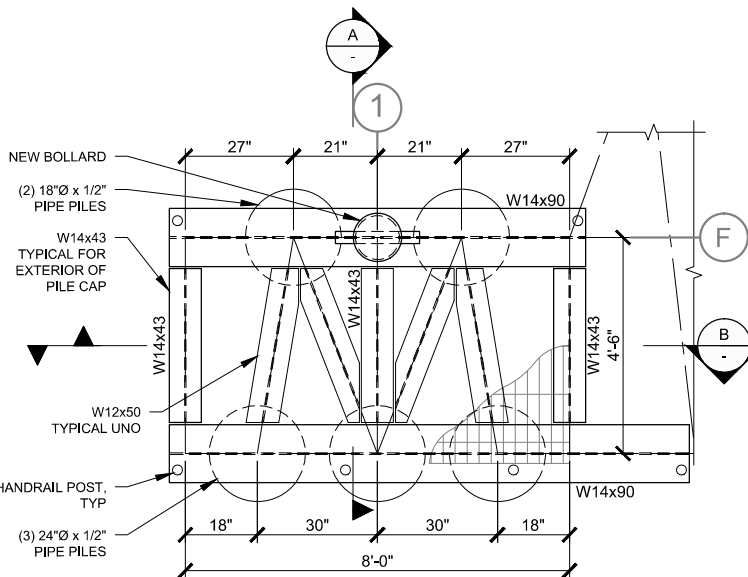
3 FENDER PILE EXTENSION AT WEST DOLPHINS
1/2" = 1'-0"



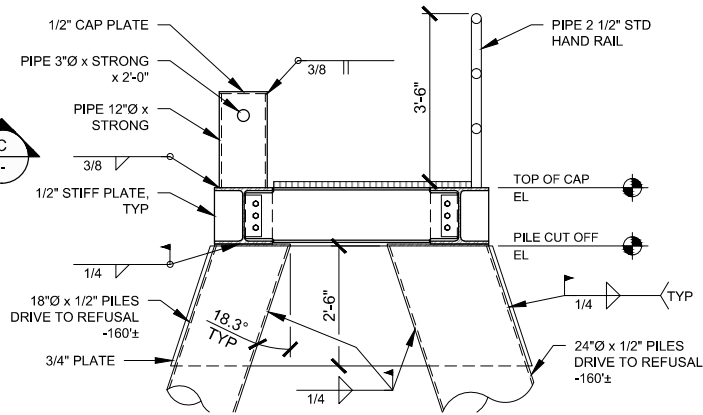
6 EAST CATWALK DETAILS
1/2" = 1'-0"

- CONC
BALLARD REPAIR

- NEW EAST
CATWALK SHEAR CONNECTIONS

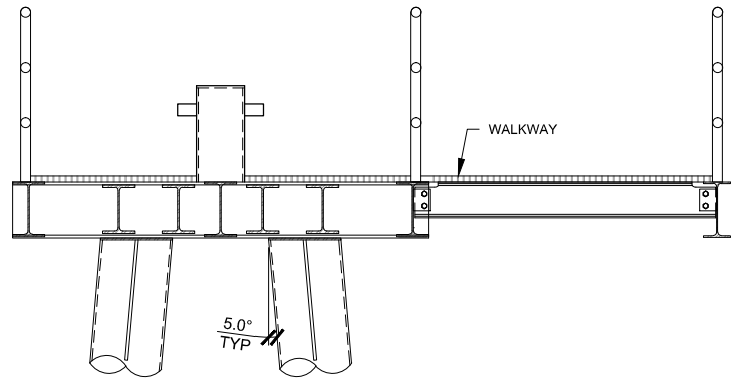


1 PILE CAP PRELIM LAYOUT
1" = 2'
0 1 2 4



A SECTION THROUGH PIPE CAP
1/2" = 1'-0"
0 1' 2' 4'

B SECTION NORTHERN PILES
1/2" = 1'-0"
0 1' 2' 4'



C SECTION SOUTHERN PILES
1/2" = 1'-0"
0 1' 2' 4'

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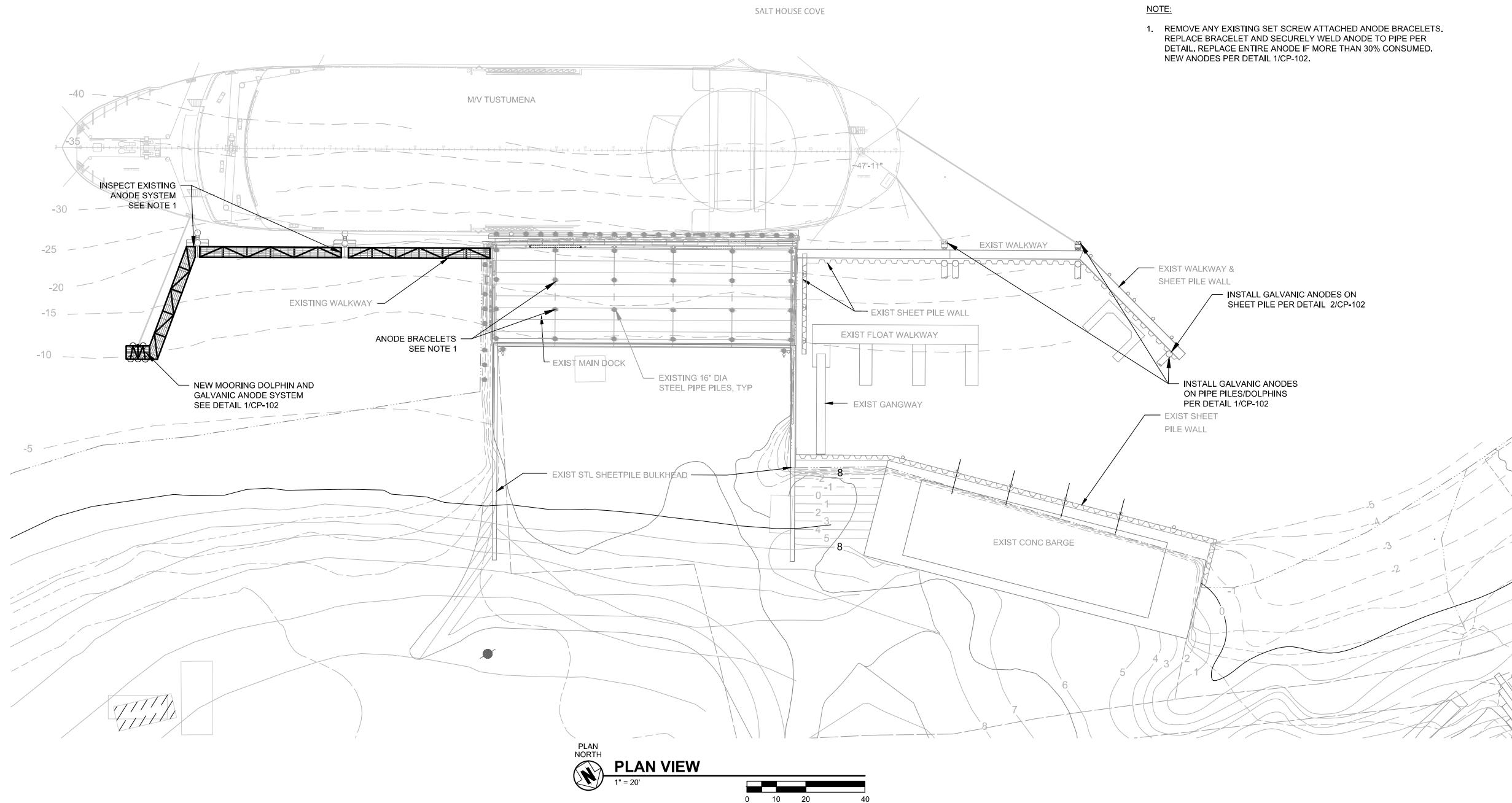
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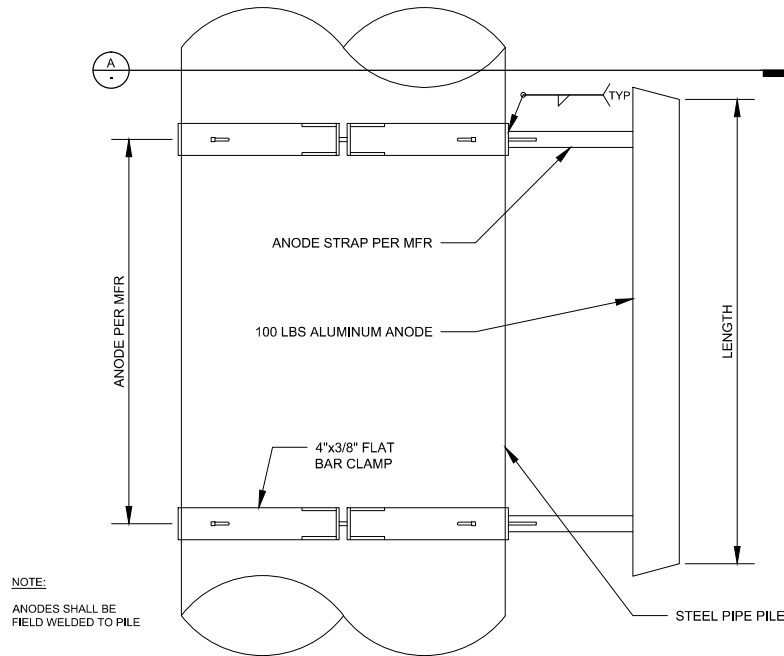
SHEET CONTENTS
CATHODIC
PROTECTION PLAN

SHEET NO. 10 of 11

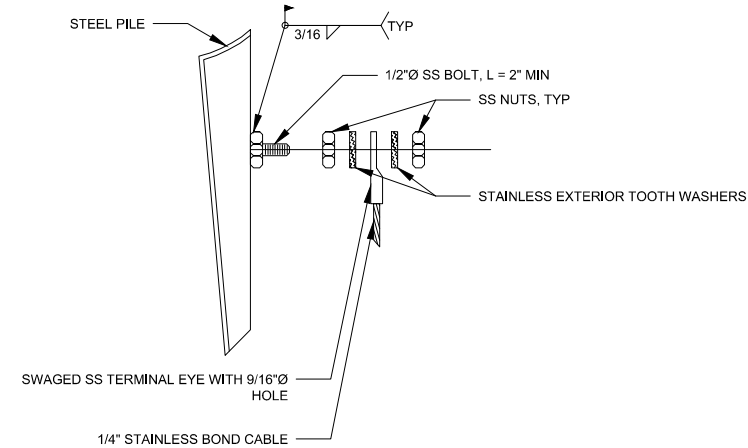
CP-101

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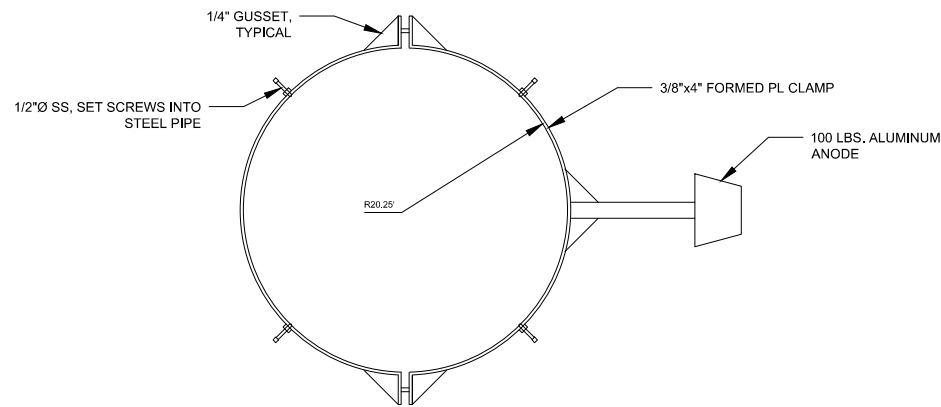




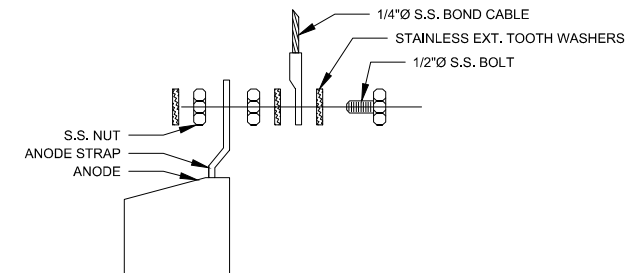
1 ANODE BRACELET DETAIL
1" = 1'-0"
0 1/2' 1' 2'



2 BOND LUG CONNECTION
1 1/2" = 1'-0"
0' 6" 1' 1 1/2'



A SECTION
1" = 1'-0"
0 1/2' 1' 2'



3 ANODE & CABLE CONNECTION
1 1/2" = 1'-0"
0' 6" 1' 1 1/2'

GENERAL NOTES:

1. ANODE CONNECTION DETAILS MAY VARY FROM THOSE INDICATED. SUBMIT ALTERNATE DETAILS TO THE ENGINEER FOR APPROVAL.
2. STANDARD SWAGGED FITTINGS FOR BOND CABLES MAY BE REPLACED WITH 1/4"Ø SS PLATE WITH 9/16"Ø HOLE FOR DIRECT CONNECTION TO 1/2"Ø BOND LUGS ON PILES (CAD-WELD 1/4"Ø SS CABLE DIRECTLY TO PLATE IN LIEU OF SWAGGED FITTING AND 1/2"Ø BOLTS).
3. ANODE MATERIALS SHALL BE ALUMINUM ALLOY CONFORMING TO THE FOLLOWING MINIMUM REQUIREMENTS:
CURRENT CAPACITY = 1100 AMP HOURS/LB
EFFICIENCY = 85%
MIN VOLTAGE POTENTIAL = 1.1 VOLTS (CU/CU REFERENCE ELECTRODE IN SEAWATER).
4. DIMENSIONS OF ANODES SHALL BE DETERMINED BY THE MANUFACTURER.
5. UNLESS OTHERWISE NOTED, OF BOND CABLES, BOND LUGS, FASTENER PLATES AND CONNECTION HARDWAR SHALL BE STAINLESS STEEL, TYPE 316. CABLES SHALL BE SHEATHED IN PLASTIC TUBING.
6. REPAIR OF FIELD WELDS AND DAMAGED COATING IN ACCORDANCE WITH SECTION 504 OF THE CONTRACT SPECIFICATIONS.

PROGRESS SET